

**High Capacity Digital Hand-Off Service (3026)**

High Capacity Digital Hand-Off Service carries voice grade local exchange and Channel Services between the customer's serving central office and the customer's compatible premises equipment using a DS1 facility with the D4 format. Up to 24 local exchange voice and Channel Services can be supported on the facility. The facility is handed-off to the customer in the D4 format.

Generic Name of ONA Service	Product Name	BSE or CNS
High Capacity Digital Hand-Off Service	BA <sup>1</sup> - High Capacity Digital Hand-Off Service	BSE

**FEATURE OPERATION:**

At the time the service is ordered the customer must designate which services are to be carried on each of the 24 channels in the DS1 facility. Future additions and changes to channel assignments must be coordinated with the Telephone Company.

Where the serving central office is a digital switch, the facility may run from the customer's high capacity interface directly into the central office switch. Only DID trunks may be carried over this directly connected facility.

**TECHNOLOGICAL AND FEATURE INTERACTION CONSIDERATIONS:**

1. The High Capacity Digital Hand-Off facility is a digital channel operating at a transmission speed of 1.544 Mbps. It is a simultaneous two-way transmission media using serial, bipolar, return-to-zero, isochronous, alternating mark inversion format.
2. 1000 Channel metallic services and Digital Data Service may not be transported over these facilities.
3. Reference: GR-54 DS1 High-Capacity Digital Service End User Metallic Interface Specifications, Issue 1, December 1995 (replaces TR-NPL-000054, Issue 1)

This service is a BSE associated with the Dedicated High Capacity Digital (1.544 Mbps) Basic Serving Arrangement in the local exchange tariff and an alternative of Line Side BSA in the access tariff.

**Inband Signaling (3018)**

Inband Signaling provides the ability to order analog voice grade Special Access circuits with signaling arrangements as described in TR-NWT-000335.

Generic Name of ONA Service	Product Name	BSE or CNS
Inband Signaling	BA - Inband Signaling	BSE

**Reference:**

- TR-NWT-000335 Voice Grade Special Access Service - Transmission Parameter Limits and Interface Combinations, Issue 3, May 1993
- MDP-326-584 - Table 4 Data Communications Using Voiceband Private Line Channels, Issue 1, October 1973

This service, if offered as a BSE, is associated with the Dedicated Voice Grade basic serving arrangement.

**Line Monitor Service (3027)**

*Note - this service was removed from the January 1996 issue of the ONA Services User Guide. It is no longer being offered.*

**Multiplexing - Digital (2000,2001,2002,2018,3005,4007,5034,7034,8013)**

Multiplexing is a technique that uses a single transmission facility to provide several transmission channels, such as by sharing the time slots of the channel (time-division multiplexing) or superimposing many frequencies at the same time (frequency-division multiplexing) in order that many signal sources and links may communicate during a given time period. This capability may include multiplexing such as:

- DS0 To Subrates - This capability provides for the time division multiplexing of multiple digital data signals operating at the subrate speeds of 2.4 Kbps, 4.8 Kbps, or 9.6 Kbps with a 64 Kbps DS0 digital signal.
- Multiplexing - DS1/Analog or DS0 - This capability provides for the pulse code modulation and/or time division multiplexing of multiple analog voice and/or multiple 64 Kbps DS0 digital signals into a 1.544 Mbps data stream for the purposes of reducing the number of transmission links required between two points.
- Multiplexing - DS1 To DS0 - This capability provides for the time division multiplexing of up to twenty-four 64 Kbps DS0 digital signals into a 1.544 Mbps DS1 digital signal.
- Multiplexing - DS1 To Voice Grade - This capability provides for the pulse code modulation and time division multiplexing of up to twenty-four 4 kHz voice grade channels into a 1.544 Mbps DS1 digital signal.
- Multiplexing - DS3/DS1 - This capability provides for the time division multiplexing of up to twenty-eight 1.544 Mbps DS1 digital signals into a 44.736 Mbps DS3 digital signal.

Generic Name of ONA Service	Product Name	BSE or CNS
Multiplexing - Digital	AM - Ameritech DS1 to DDS/DS0 Multiplexing	BSE
	AM - Ameritech DS1 to Voice/Ameritech Base Rate Multiplexing	BSE
	AM - Ameritech DS3 to Ameritech DS1 Multiplexing	BSE
	AM - DS0 To Subrate Multiplexing	BSE
	BA - Multiplexing	BSE
	BS - DS1/Analog or DS0 Multiplexer	BSE or CNS
	BS - DS3/DS1 Multiplexer	BSE or CNS
	NX - DS3/DS1 Multiplexer	BSE
	SWB - Multiplexing	BSE
	Qwest - Multiplexing	BSE

References:

- TR-TSY-000009 Asynchronous Digital Multiplexes Requirements and Objectives, Issue 1, May 1986.
- TR-TSY-000010 Synchronous DS3 Add-Drop Multiplex (ADM 3/X) Requirements and Objectives, Issue 1, February 1988.
- Ameritech - See GA-342 High Capacity Digital Special Access Service Transmission Parameter Limits and Interface Combinations, Issue 1, December 1995 (replaces TR-INA-000342, Issue 1)

This service, if offered as a BSE, is associated with the Dedicated Voice Grade and the Dedicated High Capacity basic serving arrangements.

For Ameritech, DS1 to DDS/DS0 and DS1 to Voice/Base Rate are associated with Dedicated High Capacity Digital (1.544 Mbps) type BSA; DS3 to DS1 is associated with Dedicated High Capacity Digital (>1.544 Mbps) type BSA.

DS3/DS1 multiplexer is associated with the Dedicated Digital 45 Mbps BSA.

**Route Diversity \*\***

**\*\* NOTE** - this capability was moved to the main section of the ONA Services User Guide for the July 1993 update.

**User Initiated Diagnostics (4009)**

This capability will allow ESPs to electronically report and check the status of local and access, circuit and line troubles into support systems. Customers may also receive hard copy printouts.

Generic Name of ONA Service	Product Name	BSE or CNS
User Initiated Diagnostics	BS - Administrative Management Service (AMS)	BSE or CNS

**FEATURE OPERATION:**

A new offering, currently using the BellSouth project name of Administrative Management Service (AMS), will provide a mechanized interface for customers to access this service.

This service will be offered on a dial-up or dedicated basis. The ESPs will not have direct access to the Order Entry System, but will have access through the AMS front-end processor. The front-end processor will provide the necessary security and information screening.

References: not available.

This service, if offered as a BSE, is associated with the Access To Operations Support Systems Information BSE (which is associated with the Dedicated Digital (< 64 kbps) basic serving arrangement).

**Versanet (8053)**

Versanet is a derived channel transport service. Versanet is only available on an intrastate basis. Please refer to the appropriate Tariff Reference data for availability in any specific state.

Generic Name of ONA Service	Product Name	BSE or CNS
Versanet	Qwest - Versanet	CNS

References: Not available.



**5. Appendix 1 - Region Specific Services - Technical Descriptions for Dedicated Network Access Link Serving Arrangements**

**Expedited Testing Service \***

*\* Note - this service was deleted due to technical difficulties.*

**Message Waiting Indicator Activation (Visual) - Expanded**

**\*\* NOTE** - this service was formerly 2003, but is now service 1101 in the main section of the ONA Services User Guide for the July 1996 update and later.

**Order Entry Service (8011)**

This capability delivers to an ESP the ANI of callers to certain telephone numbers along with the called number. **The call is not delivered to the ESP.** The ANI and called number are forwarded by the telephone company via a private line data link. This capability currently supports cable television pay-per-view applications. The ANI identifies which client ordered the service and the called number indicates which service (television broadcast) was ordered.

Generic Name of ONA Service	Product Name	BSE or CNS
Order Entry Service	Qwest - ANI Order Entry Service	BSE

References: not available.

This service, if offered as a BSE, is associated with the Dedicated Network Access Link basic serving arrangement.

### Initial Address Message (2006)

Signaling System Seven (SS7) provides out of band transmission of SS7 protocol signaling information between the end office switching system or the tandem office switching system and the customer's designated premises. The SS7 Signaling option requires the customer to purchase Signal Transfer Point Access and the Basic Initial Address Message Delivery option. This feature is available in SS7 signaling equipped end or tandem offices with Feature Group D and terminating Feature Group B.

The Initial Address Message provides the ESP a common switching optional feature using an SS7 message along with other information relating to the routing and handling of the call to the next switch.

The Initial Address Message Delivery option requires the customer to purchase Signal Point Access and SS7 Signaling option.

Generic Name of ONA Service	Product Name	BSE or CNS
Initial Address Message	AM - Initial Address Message	BSE

### FEATURE OPERATION:

This Initial Address Message option permits the following optional SS7 signaling call setup parameters: User Service Information, Called Party Number, Calling Party Number, Charge Number, Originating Line Information, Transit Network Selection, Carrier Selection, Service Code and Access Transport.

User Service Information is an SS7 Parameter which may be coded to indicate any one of four circuit mode bearer points for addressing ISDN customer premises equipment.

The Called Party Number parameter is the called directory number delivery.

Calling Party Number is available on a direct SS7 equipped end office connection or a connection to the access tandem when there is not Multifrequency and SS7 signaling interworking.

The Charge Number parameter is the Automatic Number Identification number (ANI). (See Calling Billing Number Delivery - FG D Protocol).

Originating Line Information parameter via SS7 is equivalent to the information digits provided with ANI digits to an interexchange carrier. This data identifies the following items: that (1) the originating telephone number is the station billing number, no special treatment is required, (2) it is a multiparty line - the telephone number is a four/eight-party line and cannot be identified - number must be obtained by operator or some other manner, (3) and ANI failure has occurred, (4) this is a hotel/motel originating call, (5) this is a coinless station, hospital, inmate, etc. call requiring special screening or handling, (6) the call is an Automatic Identified Outward Dialed (AIOD) call from customer premises equipment (CPE).

Transit Network Selection is an SS7 parameter which indicates to an intermediate node or network which carrier and circuit group is to be selected.

Carrier Selection is an SS7 parameter which identifies whether the originating line is presubscribed to an interexchange carrier or not. If the line was presubscribed this parameter will report if the end user dialed 10XXX (and/or 101XXXX), did not dial 10XXX (and/or 101XXXX), or that no indication of dialing is available.

Service Code is an SS7 parameter which allows individual calls to be identified and routed based on specific service characteristics.

Access Transport is an SS7 parameter used to transport ISDN user information across the network. This information is transparent to the local exchange carrier.

#### TECHNOLOGICAL AND FEATURE INTERACTION CONSIDERATIONS:

1. This feature is available in the following central office switches:

Switch Type	1A ESS	5ESS	DMS-100
Earliest Generic Release	1AE11	5E6	BCS30

2. References:

- Ameritech Technical reference AM-TR-OAT-000069, Issue 3, August 1993 - Ameritech Supplement Common Channel Signaling (CCS) Network Interface Specification.
- Technical Reference GR-317 LSSGR: Switching System Generic Requirements for Call Control Using the Integrated Services Digital Network User Part (ISDNUP), Issue 2, December 1997, Revision 1 – November 1998, Issue 3 – November 1999, Issue 4 – November 2000, Issue 5 – December 2001 (replaces GR-317, Issue 4).
- Technical Reference GR-394 LSSGR: Switching System Generic Requirements for Interexchange Carrier Interconnection (ICI) Using the Integrated Services Digital Network User Part (ISDNUP), (module of LSSGR, FR-64), Issue 2, December 1997, Revision 1 – November 1998, Issue 3 – November 1999, Issue 4 – November 2000, Issue 5 – December 2001 (replaces GR-394, Issue 4).
- Technical Reference GR-905 Common Channel Signaling Network Interface Specification (CCSNIS) Supporting Network Interconnection, Message Transfer Part (MTP), and ISDN User Part (ISDNUP), Issue 5, December 2001, (replaces GR-905, Issue 4).

This service, if offered as a BSE, is associated with the Dedicated Network Access Link BSA.

**Computer Assisted Call Transfer Acceptance (2009)**

Computer Assisted Call Transfer Acceptance allows the customer's host computer to notify the telephone company equipment to transfer a call after the call has been delivered to an agent.

Generic Name of ONA Service	Product Name	BSE or CNS
Computer Assisted Call Transfer Acceptance	AM - Computer Assisted Call Transfer Acceptance	BSE

**FEATURE OPERATION:**

The Dedicated Network Access Link (DNAL) BSA allows the coordinated delivery of voice and data information for incoming and outgoing calls between a customer's host computer and the telephone company. The Computer Assisted Call Transfer Acceptance feature accommodates, via the exchange of data messages on the DNAL, the transferring of calls between agents. The calls may be transferred at any time during the interaction with the customer.

**TECHNOLOGICAL AND FEATURE INTERACTION CONSIDERATIONS:**

1. This feature is available in the following central office switches:

Switch Type	DMS-100
Earliest Generic Release	BCS33

2. Currently, this feature is only available on lines served by an Automatic Call Distributor in the DMS-100 equipped with the Switch Computer Application Interface functionality.
3. References:

- Ameritech Technical reference AM-TR-NIS-000109, Ameritech Switch to Computer Application Interface (ASCAI) Network Interface Specifications, Issue 1, October 1992.

This service, if offered as a BSE, is associated with the Dedicated Network Access Link Type BSA.

**Call Redirection Acceptance (2008)**

Call Redirection Acceptance allows the customer's host computer to notify the telephone company equipment to allow the call to complete as dialed or redirect an incoming call to an alternate number within the customer's Automatic Call Distributor (ACD) group prior to the call being accepted by an agent.

Generic Name of ONA Service	Product Name	BSE or CNS
Call Redirection Acceptance	AM - Call Redirection Acceptance	BSE

**FEATURE OPERATION:**

The Dedicated Network Access Link (DNAL) BSA allows simultaneous delivery of voice and data information for incoming and outgoing calls. The Call Redirection Acceptance feature interacts with the agent's host computer which may direct the telephone company equipment, via the exchange of data messages on the DNAL, to deliver an incoming call to an agent selected by the host computer. The host computer could have the capability to simultaneously deliver the calling party's personal data to the agent's computer terminal at the same time the call is delivered to the agent's telephone.

**TECHNOLOGICAL AND FEATURE INTERACTION CONSIDERATIONS:**

1. This feature is available in the following central office switches:

Switch Type	DMS-100
Earliest Generic Release	BCS33

2. Currently, this feature is only available on lines served by an Automatic Call Distributor in the DMS-100 equipped with the Switch Computer Application Interface functionality.

3. References:

- Ameritech Technical reference AM-TR-NIS-000109, Ameritech Switch to Computer Application Interface (ASCAI) Network Interface Specifications, Issue 1, October 1992.

This service, if offered as a BSE, is associated with the Dedicated Network Access Link Type BSA.

**Video Dialtone Broadcast Service Channels (3011)**

A Video Dialtone Service that provides for the transport of video and other programming signals.

Generic Name of ONA Service	Product Name	BSE or CNS
Video Dialtone Broadcast Channels	BA - VDT - Broadcast Channels	BSE

**FEATURE OPERATION:**

Video Dialtone Broadcast Service Channels provides a Programmer-Customer with transport of 6 Mbps MPEG2 formatted digital signals from the Video Distribution Office to all end-user subscribers within the service area.

**TECHNOLOGICAL AND FEATURE INTERACTION CONSIDERATIONS:**

For interface publications, see Bell Atlantic Technical Publications TR-72550 and TR-72211.

Also see BroadBand Technologies Technical Publication TESP-0106. Contact information for BroadBand Technologies, Inc.:

BroadBand Technologies, Inc.  
 Suite 150, Triangle Business Center  
 4024 Stirup Creek Drive  
 Durham, NC 27703  
 Post Office Box 13737  
 Research Triangle Park, NC 27709-3737  
 Telephone: 919 544-0015  
 Fax: 919 544-5356

This service is offered where available and facilities permit.



**Video Dialtone Messaging Port (3013)**

A Video Dialtone Service that provides for the transport of video and other programming signals

Generic Name of ONA Service	Product Name	BSE or CNS
Video Dialtone Messaging Port Service Channels	BA - VDT - Messaging Port	BSE

**FEATURE OPERATION:**

Video Dialtone Messaging Port allows the Programmer-Customer to: 1) provide text message overlays on associated broadcast or narrowcast channels; or 2) specify designated broadcast or narrowcast channels that allow individual end-user subscribers to initiate interactive text sessions.

**TECHNOLOGICAL AND FEATURE INTERACTION CONSIDERATIONS:**

For interface publications, see Bell Atlantic Technical Publications TR-72550 and TR-72211.

This service is offered where available and facilities permit.

**Video Dialtone Narrowcast Service Channels (3012)**

A Video Dialtone Service that provides for the transport of video and other programming signals.

<b>Generic Name of ONA Service</b>	<b>Product Name</b>	<b>BS or CNS</b>
Video Dialtone Narrowcast Service Channels	BA - VDT - Narrowcast Service Channels	BSE

**FEATURE OPERATION:**

Video Dialtone Narrowcast Service Channels provides a Programmer-Customer with transport of 6 Mbps MPEG2 formatted digital signals from the Video Distribution Office to end-user subscribers located in cells selected by the Programmer-Customer.

**TECHNOLOGICAL AND FEATURE INTERACTION CONSIDERATIONS:**

For interface publications, see Bell Atlantic Technical Publications TR-72550 and TR-72211.

Also see BroadBand Technologies Technical Publication TESP-0106. Contact information for BroadBand Technologies, Inc.:

BroadBand Technologies, Inc.  
 Suite 150, Triangle Business Center  
 4024 Stirup Creek Drive  
 Durham, NC 27703  
 Post Office Box 13737  
 Research Triangle Park, NC 27709-3737  
 Telephone: 919 544-0015  
 Fax: 919 544-5356

This service is offered where available and facilities permit.

## **APPENDIX 2**

**July 31, 2002**

Updated 7/31/02

APPENDIX 2: BOC ONA CONTACTS

<b>Regional Company</b>	<b>Name Address</b>	<b>Phone</b>
<b>Ameritech Services, Inc.</b>	<b>ESP Hot Line</b>	<b>800-451-5283</b>
<b>Verizon (Bell Atlantic)</b>	<b>Jerry Simmons 2107 Wilson Blvd. Suite 1100 Arlington, VA 22201</b>	<b>703-351-2961 FAX 703-351-2975 gerald.t.simmons@verizon.com</b>
<b>BellSouth Services</b>	<b>Cindy Ford</b>	<b>404-927-1422</b>
<b>Verizon (NYNEX)</b>	<b>Jerry Simmons 2107 Wilson Blvd. Suite 1100 Arlington, VA 22201</b>	<b>703-351-2961 FAX 703-351-2975 gerald.t.simmons@verizon.com</b>
<b>Pacific Bell</b>	<b>ESP OUTREACH</b>	<b>1-800-300-6230</b>
<b>Southwestern Bell Telephone</b>	<b>Victoria Najera Southwestern Bell Telephone 311 South Akard, Room 1960.04 Dallas, TX 75202-5398</b>	<b>214-858-0765 vn2832@txmail.sbc.com FAX 214-858-0639</b>
<b>Qwest</b>	<b>Interconnection Service Center</b>	<b>800-544-7126</b>

## **APPENDIX 3**

**July 31, 2002**

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## BSA MATRIX – JULY 2002

The following report shows the relationship between the Basic Serving Arrangements (BSAs) and the Basic Service Elements (BSEs) included in the ONA Services User Guide Service Description Section issued July 31, 2002. This report was created to respond to a request from the Information Industry Liaison Committee (IILC), documented in IILC Issue #035.

The first matrix is a summary of the first section of the ONA Services User Guide Service Descriptions Section. It lists the generic name for each BSA with each LEC's name for the BSA (if the LEC company is offering it).

The matrices that follow list each of the generic BSA names, with a table entry of "BSA" for each LEC offering it. Then the generic name of each ONA service available with that BSA is listed, with an entry of "BSE" for BSE or "BSA" if the LEC has indicated that the service is available with the BSA but not as a separate BSE option. These matrices do not include the Complementary Network Services (CNS) or any region specific services.

## BSA NAMES &amp; LEC BSA NAME REFERENCES

GENERIC NAME OF BSA	LEC BSA NAME
Category 1, Type A - Circuit Switched Line BSA	AM - Circuit Switched Line BA - Business Individual Line BA - Line Side BSA BS - Voice Grade - Line - Circuit Switched NX - Circuit Switched - Line PB - Access Line Arrangement SWB - Circuit Switched - Line Side Basic Serving Arrangement (BSA-A) Qwest - Voice Grade - Line - Circuit Switched
Category 1, Type B - Circuit Switched Trunk BSA	AM - Circuit Switched Trunk BA - Trunkside BSA - 950 Option BA - Trunkside BSA - 10XXX Option BS - Circuit Switched Trunk - Voice Grade NX - Circuit Switched Trunk PB - Access Trunk Arrangement (950) PB - Access Trunk Arrangement (10XXX) SWB - Circuit Switched - Trunk Side Alternative B BSA (BSA-B) SWB - Circuit Switched - Trunk Side Alternative D BSA (BSA-D) Qwest - Voice Grade - Trunk - Circuit Switched
Category 2, Type A - X.25 Packet Switched BSA	AM - Packet Switched Network Service (X.25) BA - Public Data Network: X.25 BS - PulseLink® Packet Switching - X.25 NX - INFOPATH® Packet Switching Service PB - Public Packet Switching (X.25) SWB - Packet Switched - MicroLink II <sup>SM</sup> (X.25 Version) Qwest - Packet Switching (X.25)

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<sup>SM</sup> MicroLink II is a registered service mark of Southwestern Bell Telephone.

GENERIC NAME OF BSA	LEC BSA NAME
Category 2, Type B - X.75 Packet Switched BSA	AM - Packet Switched Network Service (X.75) BA - Public Data Network: X.75 BS - PulseLink® Packet Switching - X.75 NX - INFOPATH® Packet Switching Service PB - Public Packet Switching (X.75) SWB - Packet Switched - MicroLink II <sup>SM</sup> (X.75 Version) Qwest - Packet Switching (X.75)
Category 3, Type A - Dedicated Metallic BSA	BA - Dedicated Metallic NX - Dedicated - Metallic PB - Metallic Service SWB - Special Access - Metallic Qwest - Analog PLS - DCCS
Category 3, Type B - Dedicated Telegraph BSA	BA - Dedicated Telegraph NX - Dedicated - Telegraph Grade PB - Telegraph Grade Service Qwest - Analog PLS - LSDS
Category 3, Type C - Dedicated Voice Grade BSA	AM - Direct Analog BA - Dedicated Voice-Grade BS - Dedicated - Private Line NX - Dedicated - Voice Grade PB - Voice Grade Service SWB - Special Access - Voice Grade Qwest - Analog PLS - VGS

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GENERIC NAME OF BSA	LEC BSA NAME
Category 3, Type D - Dedicated Program Audio BSA	AM - Dedicated Program Audio BA - Dedicated Program Audio BS - Dedicated Program Audio NX - Dedicated - Program Audio PB - Program Audio Service SWB - Special Access - Program Audio Qwest - Analog PLS - AS
Category 3, Type E - Dedicated Video BSA	AM - Dedicated Video BA - Dedicated Video Service BS - Dedicated Video NX - Dedicated - Video PB - Video Service SWB - Special Access - Video Qwest - Analog PLS - VS
Category 3, Type F - Dedicated Digital (< 64 kbps) BSA	AM - Ameritech Base Rate Services BA - Digital Data Service BS - SynchroNet <sup>®</sup> /DDS NX - Dedicated - Digital Data PB - Digital Data Service, Private Line Services SWB - Special Access - MegaLink <sup>SM</sup> Data Qwest - Digital Data Service
Category 3, Type G - Dedicated High Capacity Digital (1.544 Mbps) BSA	AM - Ameritech DS1 Services BA - High Capacity Digital Service BS - MegaLink <sup>®</sup> /HiCap NX - Dedicated Digital - 1.544 Mbps PB - High Capacity Services (1.544 Mbps) SWB - Special Access - High Capacity (1.544 Mbps) Qwest - DS1 Service

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